

July  
2006

Leica Laser Microdissection  
Application Note



reSOLUTION

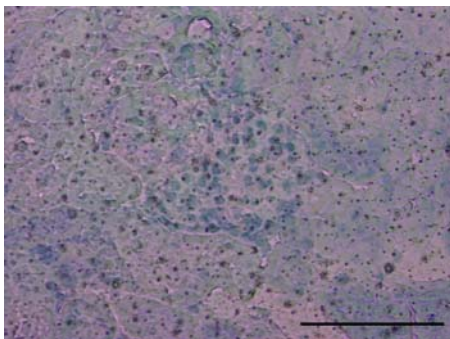
Gene Expression  
Analysis in Rat Kidney

# Gene Expression Analysis in Rat Kidney

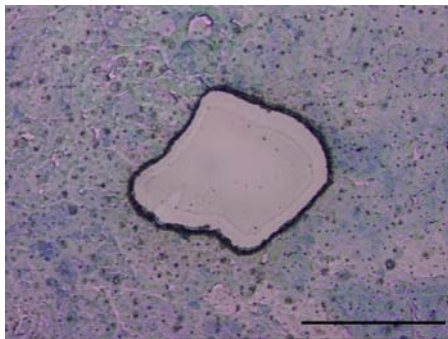
## RNA extraction and RT-PCR from rat kidney glomeruli.

### Procedure:

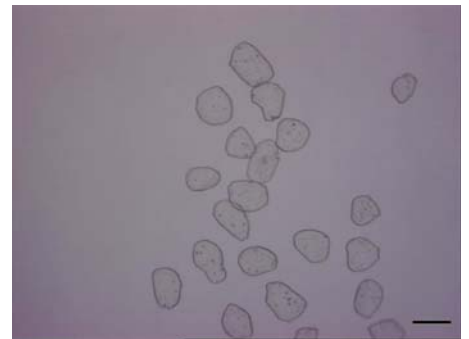
Flash frozen rat kidney was cut into 5  $\mu\text{m}$  sections followed by Toluidine Blue staining. 9.18  $\mu\text{g}$  (mean, max 14.1  $\mu\text{g}$ ) of total RNA was extracted from 100 pieces of glomerulus (6,000~7,000 cells) and directed to RT-PCR.



Before microdissection



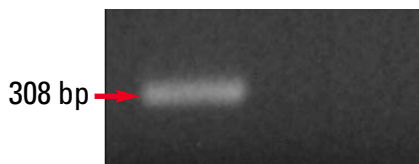
After microdissection



Inspection mode in PCR tube cap

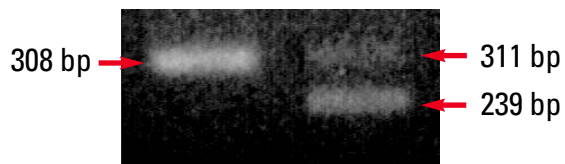
Bar = 100  $\mu\text{m}$

GAPDH and VEGF were amplified from purified total RNA using SuperScript™ One-Step RT-PCR with Platinum® *Taq* System (Invitrogen).



Left: GAPDH

Right: without RT/Platinum® *Taq* mix



Left: GAPDH

Right: VEGF188 (311 bp)

VEGF164 (239 bp)

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